

DEVAL L. PATRICK GOVERNOR

TIMOTHY P. MURRAY LIEUTENANT GOVERNOR

JUDYANN BIGBY, MD SECRETARY

JOHN AUERBACH COMMISSIONER The Commonwealth of Massachusetts
Executive Office of Health and Human Services

Department of Public Health
William A. Hinton State Laboratory Institute
305 South Street, Jamaica Plain, MA 02130

07/29/2011

Jessica Strasnick Assistant District Attorney, Essex County

Dear ADA Strasnick,

Enclosed is the information you requested in regards to Commonwealth vs. Included are copies of the following:

- 1. Curriculum Vitae for Annie Dookhan and Kate Corbett.
- 2. Drug Analysis Laboratory Receipt.
- 3. Control Cards with analytical results for samples #
- 4. Analysis sheets with custodial chemist's hand notations and test results.
- 5. GC/Mass Spectral analytical data for samples #

Kate Corbett was the custodial chemist and performed the preliminary testing and net weight for this sample. Annie Dookhan was the confirmatory chemist and analyzed the GC/MS data for this sample.

If you have any questions about these materials, please call me at the number below.

Sincerely

Annie Dookhan

Chemist II

Drug Analysis Lab

Jamaica Plain, MA. 02130

(617) 983-6631

#### Curriculum Vitae

### Annie Khan (Dookhan)

#### Education:

University of Massachusetts, Boston, Ma, Master of Science in Chemistry.

University of Massachusetts, Boston, Ma, Bachelor of Science in Biochemistry.

#### Experience:

2003 - present

Chemist I, II, Massachusetts Department of Public Health, Drug Analysis Laboratory

- \*Completed six-week training course conducted by senior staff within the Department of Public Health, Drug Analysis Laboratory.
- \*Appointed Assistant Analyst by Assistant Commissioner of Public Health, 2004.
- \*Responsible for the identification of illicit drugs to determine violations of harmful and narcotic drug laws.
- \*Trained in the use of complex analytical instrumentation, microscopes and balances for the purpose of drug analysis.
- \*Maintenance and repairs of all analytical instruments.
- \*Responsible for the Quality Control of all analytical instruments, reagents and controls/standards.
- \*Oversee the Quality Control/Quality Assurance program for the Drug Lab.
- \*Writing, revising and reviewing Standard Operating Procedures (SOPs) and Protocols.
- \*Notary Public.
- \*Qualified as an expert witness in Massachusetts Courts and U.S. District Court

2001 - 2003

QC Analyst I, II, UMMS-Massachusetts Biologic Laboratory, QC Material Control

- \*Completed proficiency training conducted by a member of the staff within the MLB Quality Control and Quality Assurance Department.
- \*Method Development for creating new techniques and enhancing vaccines for the QC Dept. and FDA.
- \*Writing, revising and reviewing Standard Operating Procedures (SOPs).
- \*Trained and supervised new chemists and interns for the department.
- \*Routine QC testing of products for the FDA.
- \*Trained in the use of complex analytical instrumentation, and balances for the purpose of QC analysis for product and validation projects.
- \*Calibration, preventive maintenance, QC and QA of analytical instrumentation.
- \*Complete testing of chemicals for Vendor Validation Project for the FDA.
- \*Compendial testing and interpretation of the USP, ACS, FCC, AOAC, Merck Index, PDR, etc.

#### Additional Training:

Dept. of Justice – Forensics Professionals. (numerous trainings)

GLP/GMP training with Massachusetts Biologic Laboratory.

QC/QA training according to FDA Codes and Regulations.

GC and GC/MS trainings with Agilent Technologies and Restek.

HPLC and LC/MS/MS trainings with Waters Cooperation.

FTIR training with Spectros.

TOC training with MBL and Sievers.

### Association:

American Chemical Society (ACS)

Northeastern Association of Forensics Science (NEAFS)

### Curriculum Vitae

### Kate A. Corbett

### Education

## Bachelor of Science Degree, CHEMISTRY May 2003 MERRIMACK COLLEGE

Coursework included: Organic Chemistry, Inorganic Chemistry, Quantitative Analysis, Instrumental Analysis, Physical Chemistry, Physics, Calculus

### **Employment**

Chemist II State Laboratory Institute (March 2008-Present)

Massachusetts Department of Public Health

**Drug Analysis Laboratory** 

- Responsible for the identification of substance and trafficking substances to determine violation of the Massachusetts drug laws
- Responsible for the identification of pharmaceuticals to determine violation of the Massachusetts drug laws
- Operate analytical instrumentation, microscopes and balances for forensic drug analysis

Chemist I State Laboratory Institute (2005-March 2008)

Massachusetts Department of Public Health

**Drug Analysis Laboratory** 

- Responsible for the identification of substance to determine violation of the Massachusetts drug laws
- Operate analytical instrumentation for the purpose of performing forensic drug analysis
- Successfully completed an eight week training course in the analysis of drugs conducted by senior staff of the Department of Public Health, Drug Analysis Laboratory
- Appointed an assistant analyst for the Department of Public Health, Drug Analysis Laboratory in 2005.

### Research Associate (September 2003 – August 2005)

SENSOR TECHNOLOGIES, INC - Shrewsbury, MA

- Prepared chemistries used in making sensor beads
- Generated and examined sensors employing fluorescence spectroscopy
- Performed protein, dye and sugar assays using UV/VIS spectrophotometry
- > Carried out titrations on ricin using fluorescence correlation spectroscopy
- > Statistical analysis of experimental data

Intern (March 2003 – August 2003)

MASSACHUSETTS STATE POLICE CRIME LABORATORY - Sudbury, MA

- Assisted in the gathering of case files to fulfill the National Institute of Justice's No Suspect Backlog Reduction Grant
- Observed in the Evidence, Criminalistics, DNA, Drug, Trace, Toxicology, and Bomb/Arson Units

### PLEASE PRINT CLEARLY OR TYPE ALL INFORMATION

# The Commonwealth of Massachusetts Executive Office of Health and Human Services

**Boston Drug Laboratory** Tel (617) 983-6622 Fax (617) 983-6625

Department of Public Health State Laboratory Institute

Amherst Drug Laboratory Tel (413) 545-2601 Fax (413) 545-2608

**Boston Hours** 

8:00 - 11:002:00-4:00

DRUG RECEIPT

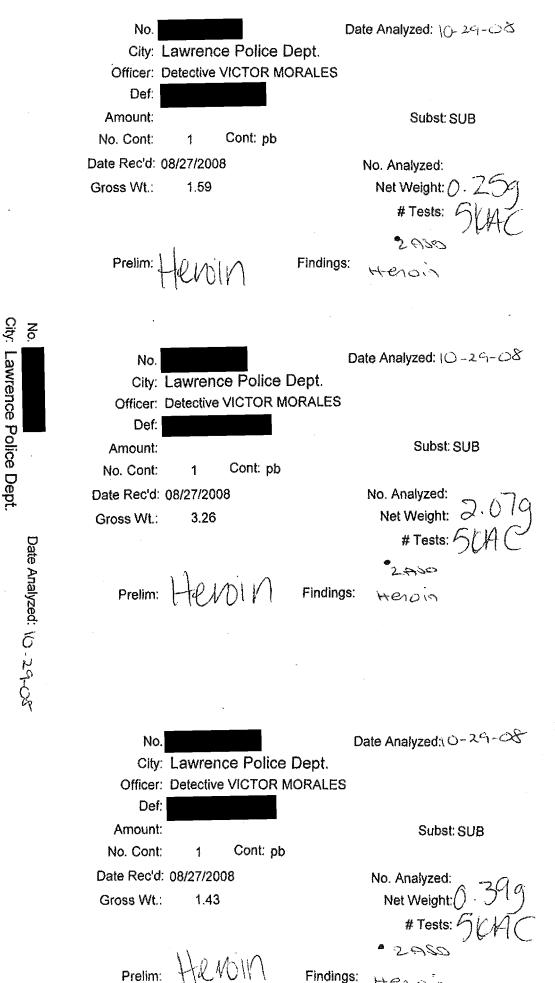
**Amherst Hours** 

9:00 - 12:00

1:00 - 3:00

Name and Rank of Submitting Officer: <u>NET OUTON HONNES</u> <u>DET. HONTE CHIND</u>	City or Department: (AWRENCE POLICE DEPT	Police Reference No.:	
DET. HOLITE CATUA	Name and Rank of Submitting Officer: <u>067 Octobe</u>	ACT HOUTE CALLA	
	Defendant(s) Name (last, first, initial):		

o be completed by Submitter Description of Items Submitted		To be completed a	
POW I PB	1.59 m		
POW 1 PB	3,26 &		
SUB 1 pB	143 m		
CRrck 4 pB	2.99 8		
eceived by:		Date:	8:27.6



Findings:

Heroin

1

Prelim: CO (Owl Findings: cocarre

Date Rec'd: 08/27/2008

No. Cont.

**Detective VICTOR MORALES** 

Gross Wt:

2.99

SAMPLE #	AGENCY LAWYUNG ANALYST KAC
No. of samples tested:	Evidence Wt.
PHYSICAL DESCRIPTION:    Physical description:   Physical description:   Physical description:   Physical description:	Gross Wt ( ): 043499  Gross Wt ( ): 043499  Pkg. Wt: 0 18419  Net Wt: 0.25289
PRELIMINARY TESTS Spot Tests  Cobalt Thiocyanate ( )  Marquis  Froehde's  Mecke's	Microcrystalline Tests  Gold Chloride  TLTA ( )  OTHER TESTS
PRELIMINARY TEST RESULTS  RESULTS HUNTY  DATE 1027 08	GC/MS CONFIRMATORY TEST  RESULTS   WOUND  MS OPERATOR   MS   DO 10   DATE   DO 29   08   DATE   DO 29   08   DATE   DATE

SAMPLE# AGENCY	MYENCE ANALYST KAC
No. of samples tested:	Evidence Wt.
physical description:  I ph Condaining a tan rocklike Substance dubble bagged	Gross Wt ( ): 228399 Gross Wt ( ): 20719 Net Wt: 20769
PRELIMINARY TESTS Spot Tests  Cobalt Thiocyanate ( )  Marquis Froehde's	Microcrystalline Tests  Gold Chloride  TLTA ( )  OTHER TESTS
Mecke's +	
PRELIMINARY TEST RESULTS  RESULTS 10 21 08	RESULTS + CONFIRMATORY TEST  RESULTS + CONFIRMATORY TEST  OPERATOR + STORE  DATE 10 29 68

No. of samples tested: AGENCY EV	ANALYST KAC
1 (0)	s Wt ( ): 0-530 Ceq s Wt ( ):

PRELIMINARY TESTS Spot Tests	Microcrystalline Tests
Cobalt Thiocyanate ( )  Marquis	Gold Chloride  TLTA ( )
Froehde's	OTHER TESTS
PRELIMINARY TEST RESULTS  RESULTS HUMIN  DATE 10 21 08	GCIMS CONFIRMATORY TEST  RESULTS HOW (M)  MS OPERATOR HS)  DATE 10 29 68

No. of samples tested:	ENCY LAWYENCE ANALYST KAC  Evidence Wt. OK
PHYSICAL DESCRIPTION:  4 Similar pbs Co an off white ch substance  all pbs inside a	
PRELIMINARY TESTS Spot Tests  Cobalt	Microcrystalline Tests  Gold Chloride  TLTA ( )  OTHER TESTS
PRELIMINARY TEST RESULTS  RESULTS 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	GC/MS CONFIRMATORY TEST  RESULTS (OCUL)  MS OPERATOR (1)  DATE (0)  OPERATOR (1)  OPERATOR (1)  DATE (0)  OPERATOR (1)  OPERATOR

Information from Data File:

File Name : E:\SYSTEM7\10\_28\_08\627744.D

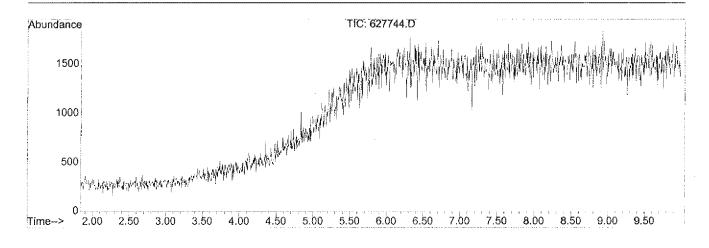
Operator : ASD

Date Acquired : 28 Oct 2008 16:57

Sample Name : BLANK

Submitted by :

Vial Number : 1 AcquisitionMeth: DRUGS Integrator : RTE



Ret. Time Area Area % Ratio %

Information from Data File:

File Name : E:\SYSTEM7\10\_28\_08\627745.D

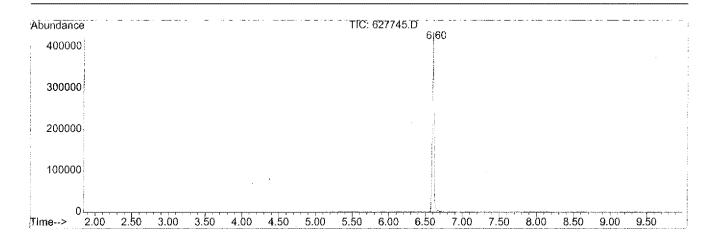
Operator : ASD

Date Acquired : 28 Oct 2008 17:10

Sample Name : HEROIN STD

Submitted by :

Vial Number : 45 AcquisitionMeth: DRUGS Integrator : RTE



Ret. Time	Area	Area %	Ratio %
6.597	662583	100.00	100.00

File Name : E:\SYSTEM7\10 28 08\627745.D

Operator : ASD

Date Acquired : 28 Oct 2008 17:10

Sample Name : HEROIN STD

Submitted by :

Vial Number : 45 AcquisitionMeth: DRUGS Integrator : RTE

Search Libraries: C:\DATABASE\SLI.L

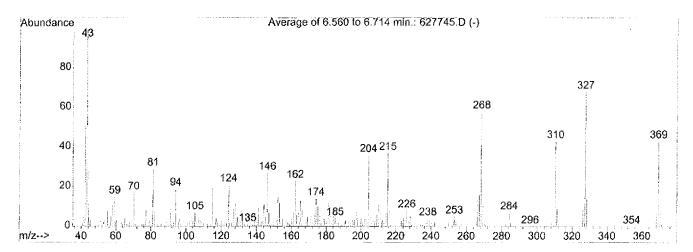
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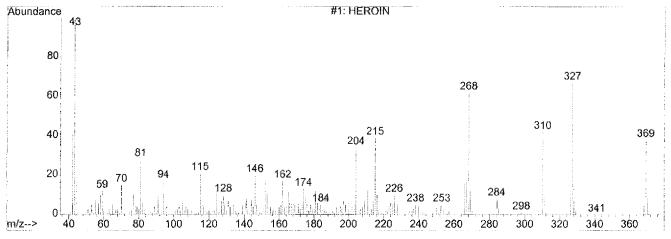
C:\DATABASE\PMW\_TOX2.L

Minimum Quality: 90

C:\DATABASE\NIST98.L

PK#	RT	Library/ID	CAS#	Qual
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627745.D

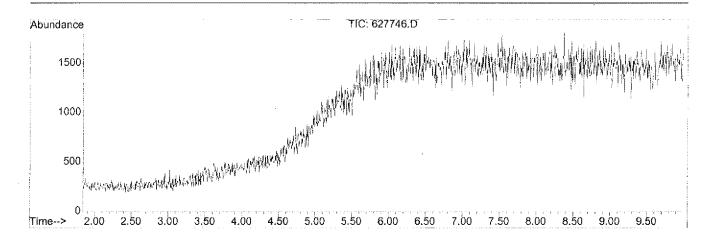
Tue Jul 26 15:05:20 2011

File Name : E:\SYSTEM7\10\_28\_08\627746.D

Operator : ASD

Date Acquired : 28 Oct 2008 17:23

Sample Name : BLANK Submitted by : LAG Vial Number : 1 AcquisitionMeth: DRUGS Integrator : RTE



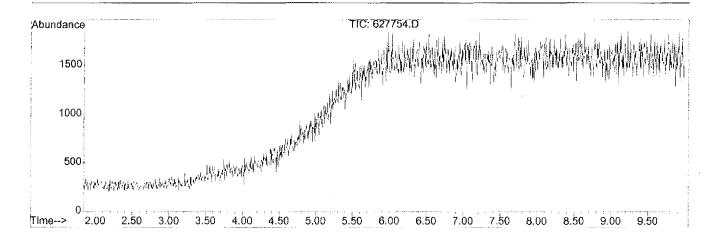
Ret. Time Area Area % Ratio %

File Name : E:\SYSTEM7\10\_28\_08\627754.D

Operator : ASD

Date Acquired : 28 Oct 2008 19:05

Sample Name : BLANK Submitted by : KAC Vial Number : 2 AcquisitionMeth: DRUGS Integrator : RTE



Ret. Time Area Area % Ratio %

<sup>\*\*\*</sup>NO INTEGRATED PEAKS\*\*\*

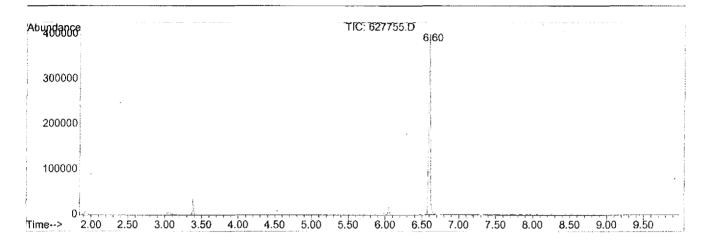
File Name : E:\SYSTEM7\10\_28\_08\627755.D

Operator : ASD

Date Acquired : 28 Oct 2008 19:17

Sample Name :

Submitted by : KAC
Vial Number : 55
AcquisitionMeth: DRUGS
Integrator : RTE



Ret. Time	Area	Area %	Ratio %
6.597	588199	100.00	100.00

File Name : E:\SYSTEM7\10 28 08\627755.D

Operator : ASD

Date Acquired : 28 Oct 2008 19:17

Sample Name :

Submitted by : KAC
Vial Number : 55
AcquisitionMeth: DRUGS
Integrator : RTE

Search Libraries: C:\DATABASE\SLI.L

Minimum Quality: 90

C:\DATABASE\PMW TOX2.L

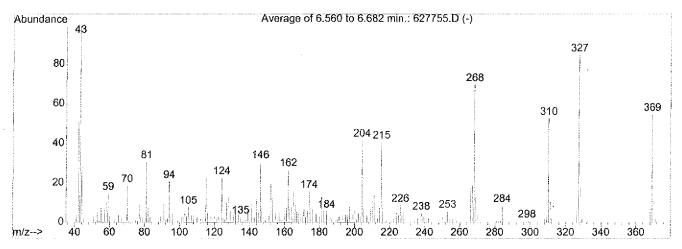
Minimum Quality: 90

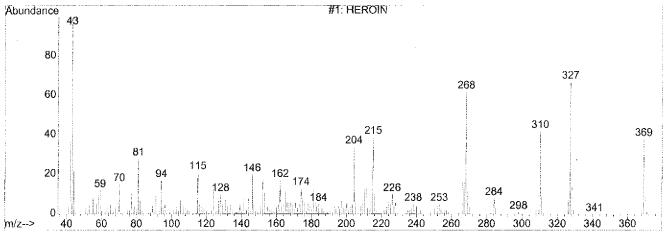
C:\DATABASE\NIST98.L

PK# RT Library/ID CAS# Qual

1 6.60 C:\DATABASE\SLI.L

1 6.60 C:\DATABASE\SLI.L HEROIN 000561-27-3 99





627755.D

Tue Jul 26 15:05:35 2011

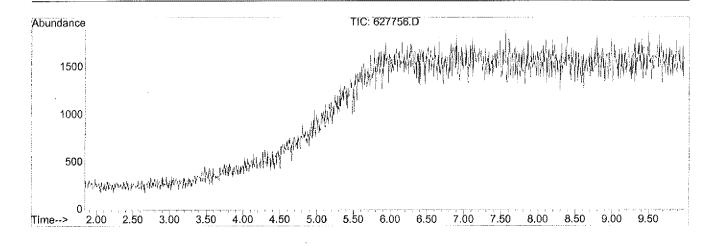
Information from Data File:

File Name : E:\SYSTEM7\10\_28\_08\627756.D

Operator : ASD

Date Acquired : 28 Oct 2008 19:30

Sample Name : BLANK Submitted by : KAC Vial Number : 2 AcquisitionMeth: DRUGS Integrator : RTE



Ret. Time Area Area % Ratio %

Information from Data File:

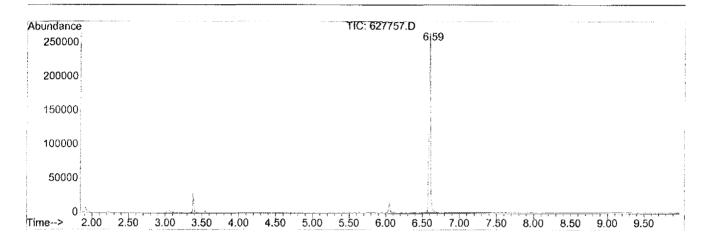
File Name : E:\SYSTEM7\10\_28\_08\627757.D

Operator : ASD

Date Acquired : 28 Oct 2008 19:43

Sample Name :

Submitted by : KAC
Vial Number : 57
AcquisitionMeth: DRUGS
Integrator : RTE



Ret. Time	Area	Area %	Ratio %
6.592	393705	100.00	100.00

File Name : E:\SYSTEM7\10 28 08\627757.D

Operator : ASD

Date Acquired : 28 Oct 2008 19:43

Sample Name :

Submitted by : KAC Vial Number : 57 AcquisitionMeth: DRUGS Integrator : RTE

Search Libraries: C:\DATABASE\SLI.L

Minimum Quality: 90

C:\DATABASE\PMW\_TOX2.L

Minimum Quality: 90

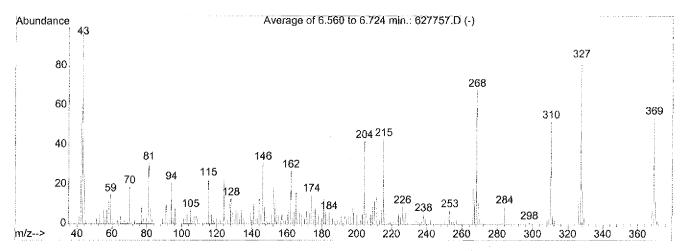
C:\DATABASE\NIST98.L

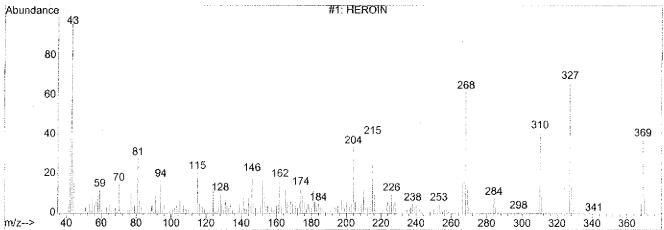
PK# RT Library/ID CAS# Qual

1 6.59 C:\DATABASE\SLI.L HEROIN

000561-27-3

99





627757.D

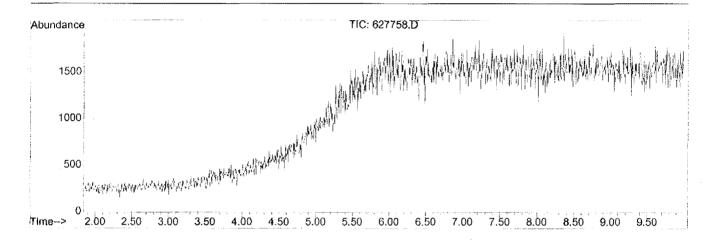
Tue Jul 26 15:05:43 2011

File Name : E:\SYSTEM7\10 28 08\627758.D

Operator : ASD

Date Acquired : 28 Oct 2008 19:56

Sample Name : BLANK Submitted by : KAC Vial Number : 2 AcquisitionMeth: DRUGS Integrator : RTE



Ret. Time Area Area % Ratio %

Information from Data File:

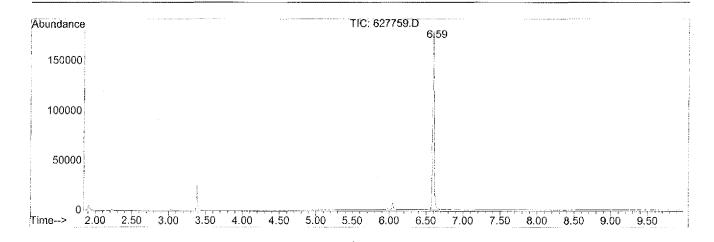
File Name : E:\SYSTEM7\10\_28\_08\627759.D

Operator : ASD

Date Acquired : 28 Oct 2008 20:08

Sample Name :

Submitted by : KAC
Vial Number : 59
AcquisitionMeth: DRUGS
Integrator : RTE



Ret. Time	Area	Area %	Ratio %
6.592	266011	100.00	100.00

File Name : E:\SYSTEM7\10 28 08\627759.D

Operator : ASD

Date Acquired : 28 Oct 2008 20:08

Sample Name :

Submitted by : KAC
Vial Number : 59
AcquisitionMeth: DRUGS
Integrator : RTE

Search Libraries: C:\DATABASE\SLI.L

Minimum Quality: 90

C:\DATABASE\PMW TOX2.L

Minimum Quality: 90

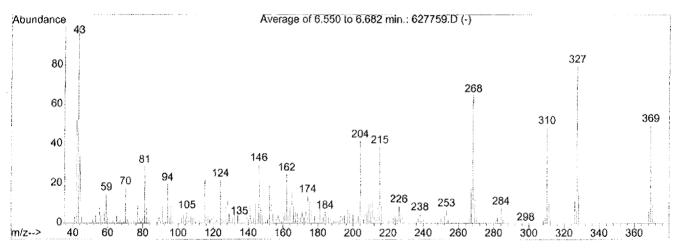
C:\DATABASE\NIST98.L

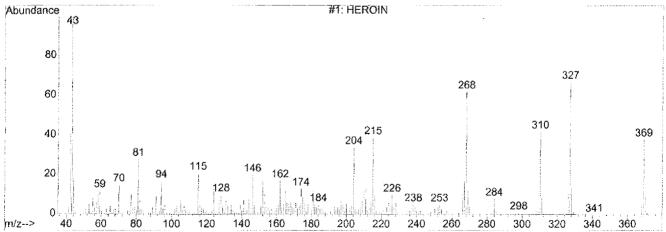
PK# RT Library/ID CAS# Qual

1 6.59 C:\DATABASE\SLI.L HEROIN

000561-27-3

99





627759.D

Tue Jul 26 15:05:51 2011

Information from Data File:

File Name : E:\SYSTEM7\10\_28\_08\627760.D

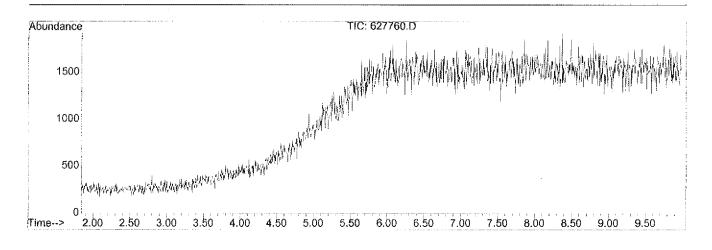
Operator : ASD

Date Acquired : 28 Oct 2008 20:21

Sample Name : BLANK

Submitted by :

Vial Number : 2 AcquisitionMeth: DRUGS Integrator : RTE



Ret. Time Area Area % Ratio %

File Name : E:\SYSTEM7\10\_28\_08\627761.D

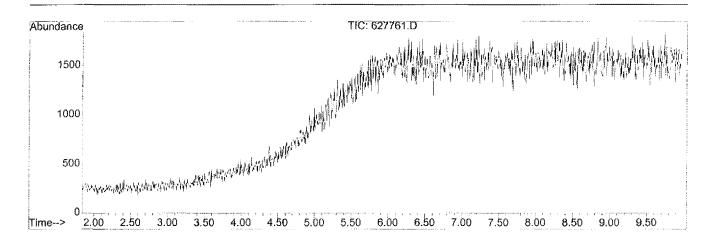
Operator : ASD

Date Acquired : 28 Oct 2008 20:34

Sample Name : BLANK

Submitted by :

Vial Number : 2 AcquisitionMeth: DRUGS Integrator : RTE



Ret. Time Area Area % Ratio %

<sup>\*\*\*</sup>NO INTEGRATED PEAKS\*\*\*

File Name

: E:\SYSTEM7\10\_28\_08\627762.D

Operator

: ASD

Date Acquired : 28 Oct 2008

20:46

Sample Name

: HEROIN STD

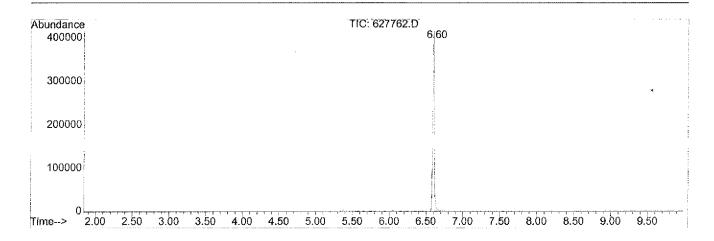
Submitted by

Vial Number AcquisitionMeth: DRUGS

62

Integrator

: RTE



Ret. Time	Area	Area %	Ratio %
6.597	605655	100.00	100.00

File Name : E:\SYSTEM7\10 28 08\627762.D

Operator : ASD

Date Acquired : 28 Oct 2008 20:46

Sample Name : HEROIN STD

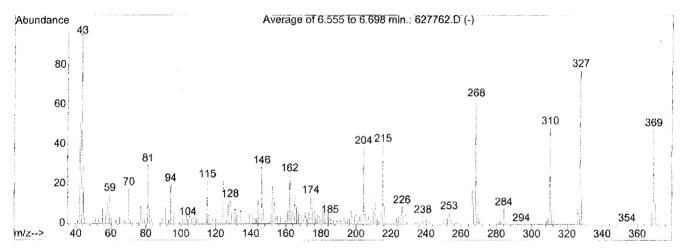
Submitted by : Vial Number : 62 AcquisitionMeth: DRUGS Integrator : RTE

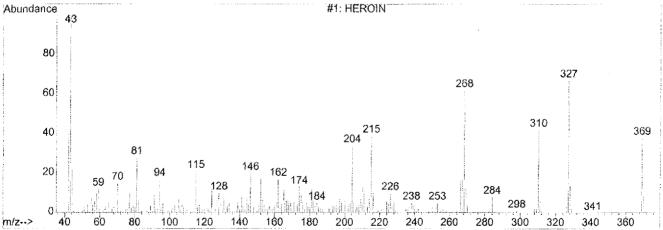
Search Libraries: C:\DATABASE\SLI.L Minimum Quality: 90

C:\DATABASE\PMW TOX2.L Minimum Quality: 90

C:\DATABASE\NIST98.L

PK#	RT	Library/ID	CAS#	Qual
 1	6.60	C:\DATABASE\SLI.L HEROIN JWH-073	000561-27-3 208987-48-8	99 4





627762.D

Tue Jul 26 15:06:41 2011

Information from Data File:

File Name : E:\SYSTEM7\10\_28\_08\627763.D

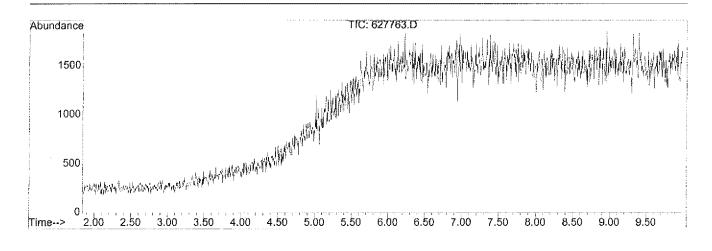
Operator : ASD

Date Acquired : 28 Oct 2008 20:59

Sample Name : BLANK

Submitted by :

Vial Number : 2 AcquisitionMeth: DRUGS Integrator : RTE



Ret. Time Area Area % Ratio %

File Name : E:\SYSTEM4\10\_28\_08\627850.D

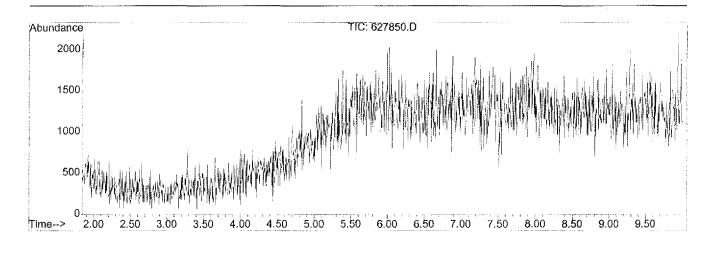
Operator : ASD

Date Acquired : 28 Oct 2008 19:20

Sample Name : BLANK

Submitted by

Vial Number : 2 AcquisitionMeth: DRUGS Integrator : RTE



Ret. Time

Area

Area

Ratio %

Information from Data File:

File Name : E:\SYSTEM4\10\_28\_08\627851.D

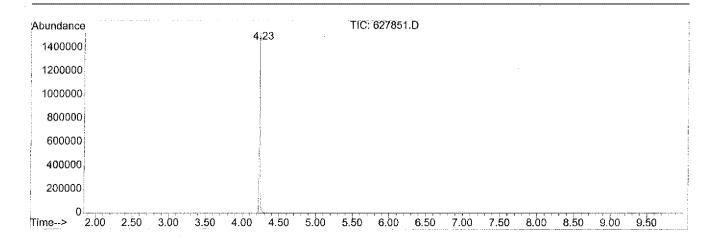
Operator : ASD

Date Acquired : 28 Oct 2008 19:34

Sample Name : COCAINE STD

Submitted by :

Vial Number : 51 AcquisitionMeth: DRUGS Integrator : RTE



Ret. Time	Area	Area %	Ratio %
4.234	1327986	100.00	100.00

File Name : E:\SYSTEM4\10 28 08\627851.D

Operator : ASD

Date Acquired : 28 Oct 2008 19:34

Sample Name : COCAINE STD

Submitted by :

Vial Number : 51 AcquisitionMeth: DRUGS Integrator : RTE

Search Libraries: C:\DATABASE\SLI.L Minimum Quality: 90

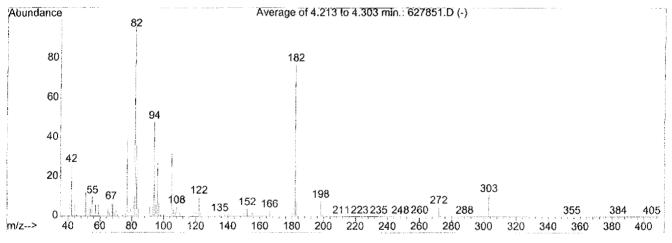
C:\DATABASE\PMW TOX2.L Minimum Quality: 90

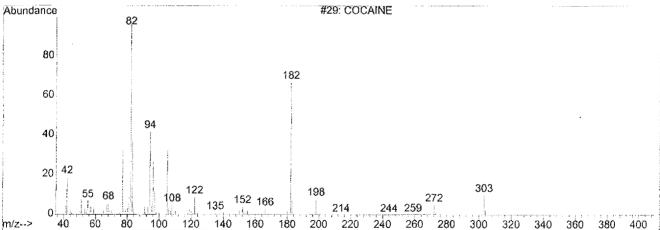
C:\DATABASE\NIST98.L

PK# RT Library/ID CAS# Qual

1 4.23 C:\DATABASE\SLI.L

COCAINE 000050-36-2 99





627851.D

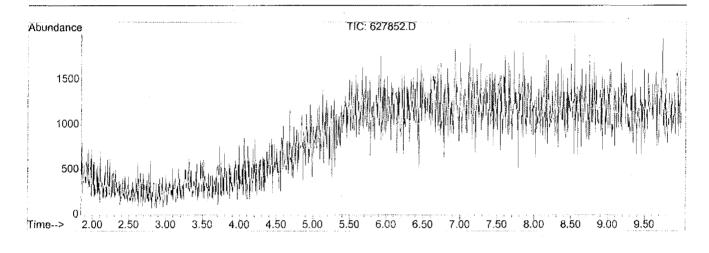
Tue Jul 26 15:07:34 2011

File Name : E:\SYSTEM4\10\_28\_08\627852.D

Operator : ASD

Date Acquired : 28 Oct 2008 19:48

Sample Name : BLANK Submitted by : KAC Vial Number : 2 AcquisitionMeth: DRUGS Integrator : RTE



Ret. Time

Area

Area %

Ratio %

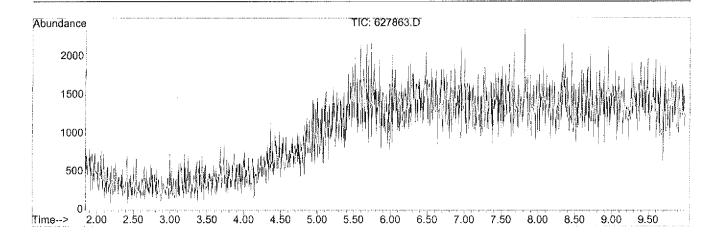
Information from Data File:

File Name : E:\SYSTEM4\10\_28\_08\627863.D

Operator : ASD

Date Acquired : 28 Oct 2008 22:19

Sample Name : BLANK Submitted by : KAC Vial Number : 2 AcquisitionMeth: DRUGS Integrator : RTE



Ret. Time Area Area % Ratio %

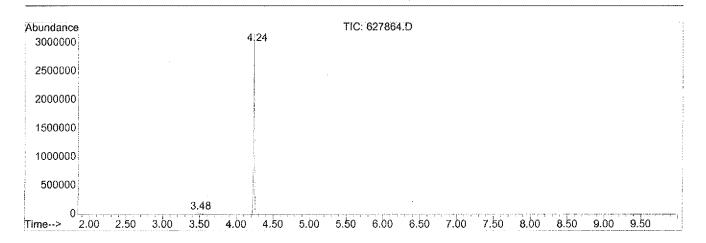
File Name : E:\SYSTEM4\10\_28\_08\627864.D

Operator : ASD

Date Acquired : 28 Oct 2008 22:33

Sample Name :

Submitted by : KAC
Vial Number : 64
AcquisitionMeth: DRUGS
Integrator : RTE



Ret. Time	Area	Area %	Ratio %	
3.475	109567	3.71	3.85	
4.237	2843000	96.29	100.00	

File Name : E:\SYSTEM4\10\_28\_08\627864.D

Operator : ASD

Date Acquired : 28 Oct 2008 22:33

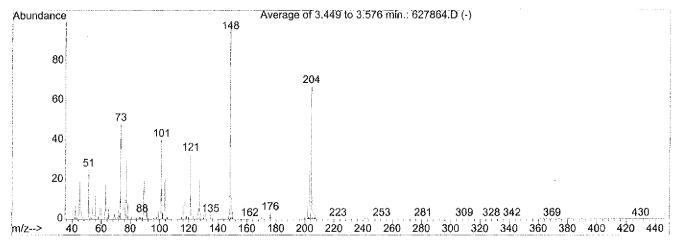
Sample Name : Submitted by : K

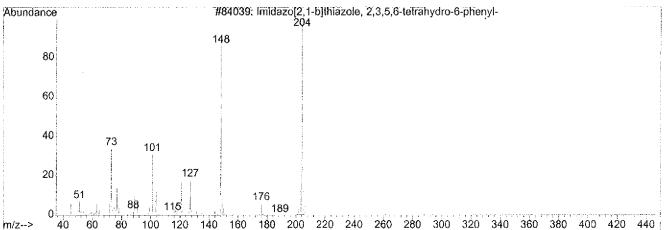
Submitted by : KAC
Vial Number : 64
AcquisitionMeth: DRUGS
Integrator : RTE

Search Libraries: C:\DATABASE\SLI.L Minimum Quality: 90

C:\DATABASE\PMW TOX2.L Minimum Quality: 90

C:\DATABASE\NIST98.L





627864.D

Tue Jul 26 15:07:51 2011

File Name : E:\SYSTEM4\10 28 08\627864.D

Operator : ASD

Date Acquired : 28 Oct 2008 22:33

Sample Name :

Submitted by : KAC
Vial Number : 64
AcquisitionMeth: DRUGS
Integrator : RTE

Search Libraries: C:\DATABASE\SLI.L Minimum Quality: 90

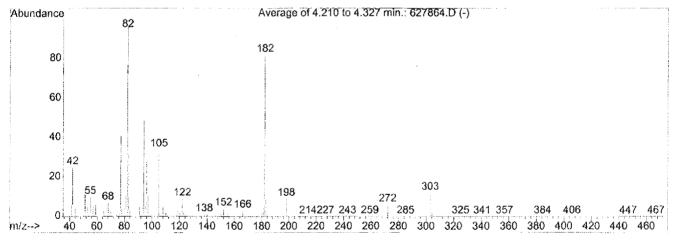
C:\DATABASE\PMW\_TOX2.L Minimum Quality: 90

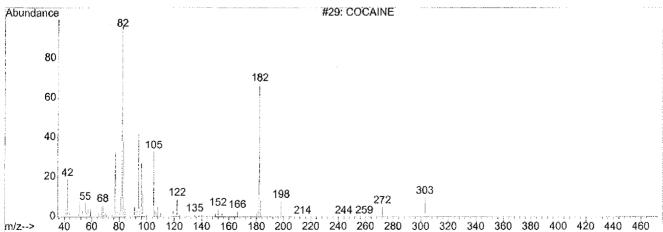
C:\DATABASE\NIST98.L

PK# RT Library/ID CAS# Qual

2 4.24 C:\DATABASE\SLI.L COCAINE

000050-36-2 99





627864.D

Tue Jul 26 15:07:52 2011

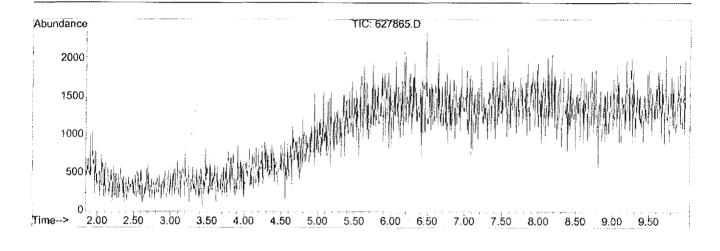
Information from Data File:

File Name : E:\SYSTEM4\10\_28\_08\627865.D

Operator : ASD

Date Acquired : 28 Oct 2008 22:47

Sample Name : BLANK Submitted by : KAC Vial Number : 2 AcquisitionMeth: DRUGS Integrator : RTE



Ret. Time Area Area % Ratio %

Information from Data File:

File Name : E:\SYSTEM4\10\_28\_08\627868.D

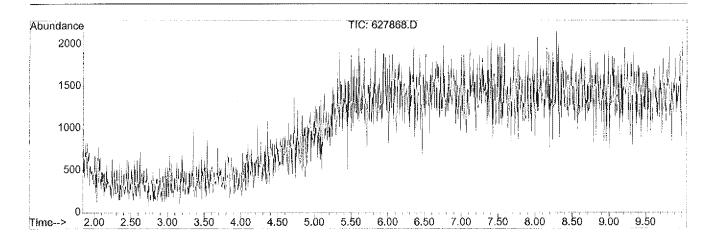
Operator : ASD

Date Acquired : 28 Oct 2008 23:28

Sample Name : BLANK

Submitted by :

Vial Number : 2 AcquisitionMeth: DRUGS Integrator : RTE



Ret. Time

Area

Area

Ratio %

Information from Data File:

File Name : E:\SYSTEM4\10\_28\_08\627869.D

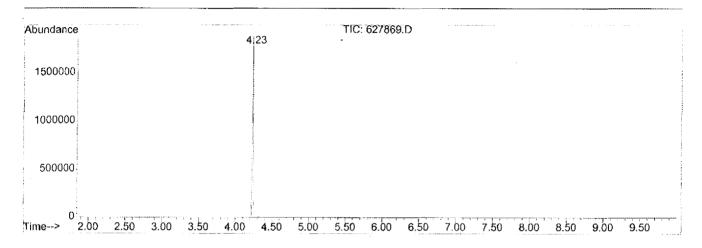
Operator : ASD

Date Acquired : 28 Oct 2008 23:42

Sample Name : COCAINE STD

Submitted by :

Vial Number : 69 AcquisitionMeth: DRUGS Integrator : RTE



Ret. Time	Area	Area %	Ratio %
4.234	1546069	100.00	100.00

File Name : E:\SYSTEM4\10\_28\_08\627869.D

Operator : ASD

Date Acquired : 28 Oct 2008 23:42

Sample Name COCAINE STD

Submitted by

Vial Number 69 AcquisitionMeth: DRUGS Integrator : RTE

C:\DATABASE\SLI.L Minimum Quality: 90 Search Libraries:

C:\DATABASE\PMW TOX2.L Minimum Quality: 90

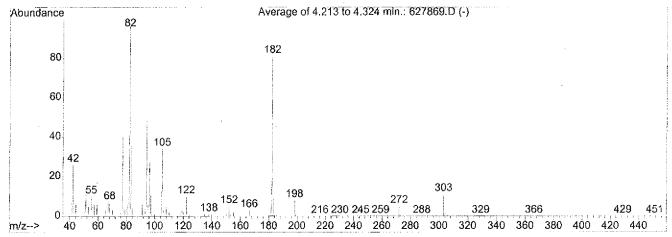
C:\DATABASE\NIST98.L

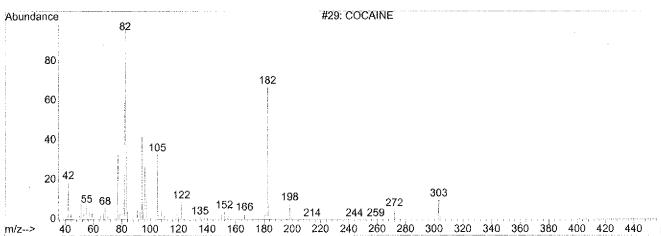
PK#	RT	Library/ID	CAS#	Qual
-d	4 00			

1 4.23 C:\DATABASE\SLI.L COCAINE

000050-36-2

99





627869.D

Tue Jul 26 15:08:06 2011

Information from Data File:

File Name : E:\SYSTEM4\10\_28\_08\627870.D

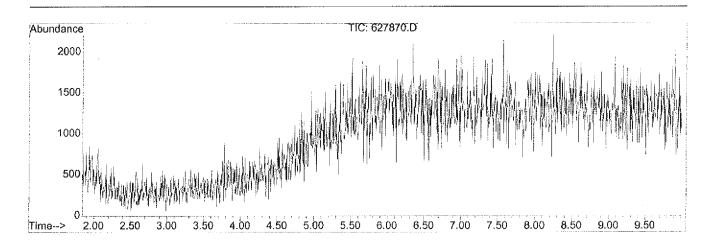
Operator : ASD

Date Acquired : 28 Oct 2008 23:56

Sample Name : BLANK

Submitted by :

Vial Number : 2 AcquisitionMeth: DRUGS Integrator : RTE



Ret. Time Area Area % Ratio %